

Dear Immunization/Registry Project Manager

As you know, the vision for the immunization registries being developed at the state, county, and local levels, has always been that the systems would be able to exchange data. This is vitally important, given the mobility of all our populations. In order for this to be achieved the registries must agree to adhere to standards that make the exchange of data not only more efficient and reliable but possible.

As the development of registries has progressed, there has been the potential for some registries to implement standards that may work locally, but may create problems later on as they attempt to exchange data. Without standardization, the potential exists that some registries would find it difficult, or perhaps, impossible, to exchange data with other systems.

There has been much discussion about the data communications standard that would be used as the protocol to exchange registry data. In addition, a significant amount of effort has been expended to work with vendors of patient management systems; so that immunization data entered in private physician's offices can be captured and exchanged with the registries.

It has become clear that there is a need for one standard that the central registries can use to exchange data and that can be provided to vendors of patient management systems to capture data from physician's offices. The Committee on Immunization Registry Standards and Electronic Transactions (CIRSET) is pleased to report a significant development in this effort, and needs your support to assure its successful implementation.

CIRSET is a peer organization in partnership with CDC and AKC. CIRSET started as six immunization registry projects independently working on creating a standard for data exchange using the Health Level Seven (HL7) standard protocol. These projects were California, Georgia, Illinois, Michigan, San Bernardino and New York State. There were significant variations among the projects even though each followed the HL7 standard, to the extent where data exchange was not possible. When the registries approached commercial vendors, they were encouraged to develop a standard for national implementation because it was not feasible to develop interfaces for each immunization registry.

CDC and AKC brought the projects together along with staff from Kaiser Permanente and the Indian Health Service. The group reviewed each registry's implementation plan and reached consensus on one standard implementation that would ensure that each registry's needs were met. As a result, NIP published the "Implementation Guide for Immunization Data Transactions using Version 2.3.1 of the Health Level Seven (Version 2.3.1) Standard Protocol". Copies were sent to the state Immunization Program Managers. Copies are available from the NIP web site.

CIRSET hopes that your project can benefit from the time and effort already invested in developing the standards guide. We are asking you to review the guide and assess how well it applies to your registry. CDC has offered to provide technical assistance in the review process. Those interested may call Susan Abernathy or Julie Gamez at (404) 639-8177.

We ask that you join us in committing to the immunization registry standard that hopefully will be a national model.

CIRSET has to offer

- a means to maintain and update the immunization standards that meets the needs of all participating projects
- technical assistance to registries developing interfaces
- assistance in the review of standards and compatibility with other registries

Attached is a letter of intent which members of CIRSET have signed, which state

- they have reviewed the standards and when ready to develop a interface using HL7, agree to adhere to the standards as stated in the implementation guide
- they work with CIRSET to test the implementation of record exchange using the standards
- implement appropriate CIRSET updates to the standard

Please contact me with any questions or comments at (518) 473-4437 or through e-mail at [MKF06@HEALTH.STATE.NY.US](mailto:MKF06@HEALTH.STATE.NY.US). Those wishing to sign the letter are welcome to do so and send a fax copy to me at (518) 474-1495

Sincerely

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## LETTER OF INTENT

After reviewing the “Immunization Data Transactions Using the Health Level Seven (Version 2.3.1) Standard Protocol” document, the undersigned agrees to:

1. Adhere to standards as stated in the implementation guide for the transmission of immunization data.
2. Periodically review the current CIRSET recommendations and upgrade their registry implementation to be consistent with the recommended standard
3. Resist any deviation from the guide.
4. Submit recommendations for standards modifications to CIRSET for review. CIRSET will be responsible for assessing the impact of any modification on all participating projects and implementing any resulting changes within the standard.
5. Successfully test the registry implementation of record exchange with a designated CIRSET member.

Name of Registry:

Scope of Registry (geographical coverage)

Signing Authority for Registry	(Print)	Title
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Signature of Authority	(Sign)	Date
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## ATTACHMENTS:

1. CIRSET-Recommended Standard Data Elements: These represent fields required by HL7 to form standard messages and supplementary to the NIP Core Data Set.
2. List of immunization projects that have signed the letter of intent.

## ATTACHMENT 1

### CIRSET-Recommended Standard Data Elements

The following list represents the combination of fields 1) required by Health Level Seven (HL7) to form a standard unsolicited update message (bolded) and 2) the NIP core data set. The purpose of the list is to demonstrate to program managers the amount of information involved in a commitment to implement the minimum HL7 update message as described in the Implementation Guide for Immunization Data Transactions using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol, Version 2.0, June 1999 (Implementation Guide). Immunization registries that wish to transmit records with more information can add any of the other messages, such as query capability, or other optional segments and fields that are included in the Implementation Guide.

In the list below, items required by HL7 to form a standard message are bolded. If they are not valued in a message, a standard parser will return an error message. Some of the HL7-required fields are also core data elements. Remaining items from the core data set are listed, but not bolded. While registries are strongly encouraged by NIP to collect and maintain this information, failure to value these fields will not cause an error message by a standard parser.

The Message Header Segment is used to define the intent, source, destination, and some specifics of the syntax of a message. Its required fields are:

**Field separator**. The character used to separate the fields in the entire message. The recommended value is the vertical bar |.

**Encoding characters**. Four characters used to divide information contained in a field. The recommended values are ^~\&(component separator, repetition separator, escape character, and subcomponent separator).

**Message type**. This field identifies the type of message being sent. The data segments to be recognized are defined by the message type.

**Message control ID**. Number or other identifier that uniquely identifies the message. Each immunization registry will design its own method for assigning control IDs.

**Processing ID**. Used to decide how to process the message as defined in HL7 processing rules.

**Version ID**. Matched by the receiving system to its own HL7 version to be sure the message will be interpreted correctly.

The Patient Identification Segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying and demographic information that, for the most part, is not likely to change frequently. Its required fields are:

**Patient identifier list**. This field contains the list of identifiers (one or more) used by the registry to uniquely identify a patient ( e.g., medical record number, billing number, birth registry, national unique individual identifier, etc.).

**Patient name**. The current assumed legal name of the patient should be sent in the first instance of this field. The field may repeat to give other names by which the patient has been known such as birth name.

**Mother's maiden name**. This field contains the family name under which the mother was born (i.e., before marriage). It is used to distinguish between patients with the same last name.

**Date of birth**. This field contains the patient's date and (if applicable) time of birth.

**Sex**. This field contains the patient's sex.

**Patient address**. This field lists the mailing address of the patient. The field may repeat to

give other addresses associated with the patient such as the place of birth.

The Next of Kin/Associated Parties Segment contains information about the patient's next of kin and other associated or related parties. This is a repeating segment, allowing for information about multiple related parties. Its required fields are:

**Set ID - NK1**. This field numbers the repetitions of the NK1 segment.

**Name**. This field gives the name of the next of kin or associated party. Multiple names for the same person are allowed.

**Relationship**. This field defines the relationship of the next of kin or associated party.

The Pharmacy/Treatment Administration Segment carries pharmacy administration data. It is a repeating field and can record unlimited numbers of vaccinations. Its required fields are:

**Give sub-ID counter**. For immunization registries, this field's value should always be zero.

**Administration sub-ID counter**. This field can be used to record dose number for a particular vaccine series and product, if applicable.

**Date/time start of administration**. This field records when the administration is started. We use this field to show the vaccination date.

**Date/time end of administration (if applies)**. When administration continues over some time, such as during a transfusion, the end date/time may be recorded. For typical vaccines, the end of administration is generally assumed to be the same as the date/time of *date/time start of administration field (above)* and need not be valued.

**Administered code**. This field identifies the medical substance administered.

**Administered amount**. This field records the amount of the medical substance administered. The units are expressed in the next field.

**Substance lot number**. This field records the lot number of the medical substance administered.

**Substance manufacturer**. This field records the manufacturer of the medical substance administered.

Many additional optional fields are possible using the HL7 immunization messages. Registries that need to record information not outlined above can add messages, segments, and/or fields that allow for the collection and transmission of additional detail as described in the Implementation Guide. For example, a registry could add fields to the PID segment in order to collect additional patient information such as the patient's phone number, birth order, or any number of mother's identifiers such as Social Security number. A registry that needed to collect even more detailed demographic information could add the Patient Additional Demographic (PD1) Segment that records demographic information about a patient that is likely to change. For example, a registry could build in fields that would record a patients' living arrangement, primary care facility and provider name and ID number, type of reminder/recall, consent status, and patient status.

**ATTACHMENT 2**  
**CIRSET-List of Participating Projects**

New York State Immunization Information System (NYSIIS)

San Bernardino County Immunization Tracking System

California Statewide Immunization Information System (CA SIIS)

Illinois Immunization Information System - Tracking Our Toddlers Shots (TOTS)

Georgia Registry of Immunization Transactions and Services (GRITS)

Michigan Childhood Immunization Registry (MCIR)

Maryland ImmuNet

Massachusetts Immunization Information System (MIIS)

West Virginia Immunization Information System

Arizona Statewide Immunization Information System

Utah Statewide Immunization Information System

Washington State CHILD Profile